# **Identify Sources of Pollution**

# **Grades**

2-4

# **Subject**

Health – tie in to science

#### **Duration**

45 minutes to 1 hour

## **Materials**

Markers, white board, pencils, paper, and tangible reward for winning group

## **Objectives**

TSWBAT work successfully in cooperative groups to brainstorm sources of pollution.

TSWBAT come to a group consensus in order to identify sources of pollution

TSWBAT List multiple sources of pollution.

TSWBAT appreciate that pollutants are bad for the environment and human health.

#### <u>Set</u>

Read The Lorax by Dr. Suess or other short story dealing with pollution.

#### **Instructional Input**

Introduce the subject and define pollution in an age appropriate manner.

- 1. Ask Students to take out their own paper and list as many sources of pollution as they can.
- 2. Set up the group activity by going over rules for cooperative groups and your expectations for this exercise. Transition students into groups. The group should have at least one recorder.
- 3. Groups will brainstorm as many possible sources of pollution as possible (must understand the process of cooperative grouping and brainstorming first)
- 4. After brainstorming period, come to a consensus about each example. Is it a source of pollution or not?
- 5. Groups then share their list one at a time in round robin fashion, each group giving one example. Students/teacher keeps track on the board. Have 2 columns, Source of Pollution and "possible sources".
- 6. Groups know that if they supply 3 that end in the "possible sources" column, they are knocked out. Of course, duplicate answers don't count, all answers must be original.
- 7. As groups run out of responses, they are knocked out.
- 8. The winning group is the one that is able to supply the most viable examples of pollution. They win some type of tangible reward, appropriate for your classroom.
- 9. Go through and discuss/clarify the "possible sources" examples for the class. Make sure each team has the chance to share their entire list.

## **Checks for understanding**

The number of "possible sources" will indicate level of student understanding. Reteaching will take place at the end of the lesson when the teacher explains/clarifies the misconceptions that led to the "possible sources" answers.

# **Guided Practice**

Takes place in the activity  $\rightarrow$  brainstorming and listing.

## **Extended Practice**

Assign students the task of asking an adult (their parents are acceptable) what they think the most serious source of pollution is in their community and why.

Students should be prepared to share their "interview" results with the class tomorrow.

## Closure

Review the list on the board. Reiterate the definition of pollution.

# Follow Up

Allow students to share the results of their interviews. If time will not allow a sharing of all results, list as many different sources as the students came up with and then take a poll to see which source was cited the most. Discuss these issues as appropriate, especially if there are misconceptions or multiple results for the same source.

Try logging on to the IDHR, IDEQ, USEPA, ATSDR web sites for additional information

http://www2.state.id.us/dhw/BEHS/

http://www2.state.id.us/deq

www.epa.gov

http://www.atsdr.cdc.gov/